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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,758	09/17/2003	William Patrick Tunney	11884/404001	3826

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KENYON & KENYON LLP
1500 K STREET N.W.
SUITE 700
WASHINGTON, DC 20005

EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/663,758

Applicant(s)

TUNNEY, WILLIAM PATRICK

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Carl Thomson
Examiner
2007 OCT 24
2194

DETAILED ACTION

1. Claims 28 – 40 are pending in the application.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 28, 29 and 31 – 40 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,578,046 to Chang et al. [hereinafter Chang].**

5. As to claim 28, Chang teaches a method to simplify access and manipulation of a set of elements in a collection [col. 6, lines 17 – 43], wherein the collection includes a format definition [Class Name Description Collection; col. 7, line 59 – col. 8, line 25 and col. 9, lines 1 – 35], the method comprising:

creating an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

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pointing the iterator to the collection [setToFirstCollection() in the FederatedIterator 38 will set the iterator position to the first non -collection element of the FederatedCollection 8; col.13, lines 41 – 60];

the iterator automatically [col. 13, lines 41 – 60]:

determining the format of the collection from the format definition [Class Name Description Collection 1 represents a collection of objects Iterator 36 to iterate over collection members. It has sub- classes to match each collection type; col. 8, lines 5 – 23];

creating a reader object that can process collections of the determined format [Query 13 the class for a query object which is associated with a specific datastore; col. 8, lines 41 – 60 and col. 10, lines 1 – 13];

associating the reader object with the collection [Query 13 is an interface for a query object associated with one specific datastore; col. 18, lines 35 – 45];

extracting the set of elements from the collection using the reader object [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

instantiating a set of objects representing the set of elements [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30], wherein the set of objects can be iterated through and operated on by the iterator [first Iterator 36 is a regular iterator for

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FederatedCollection 8, thus each time returning a collection object 1. The second Iterator 42 is an iterator for a collection object 1, therefore it returns DDOs 28 as members of the collection 1; col. 13, lines 41 – 60]; and

in response to a request to process an element in the set of elements col. 7, line 57 – col. 8, line 2], iterating through the set of objects [federated iterator 38 is used to iterate over the collective members of FederatedCollection 8 across collection boundaries; col. 16, lines 15 – 25] and performing the requested process on an object representing the element [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

6. As to claim 34, Chang teaches a method to simplify access and manipulation of a set of elements in a collection [col. 6, lines 17 – 43], wherein the collection includes a format definition [col. 7, line 59 – col. 8, line 25 and col. 9, lines 1 – 35], the method comprising:

creating an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

pointing the iterator to the collection [setToFirstCollection() in the

FederatedIterator 38 will set the iterator position to the first non -collection element of the FederatedCollection 8; col.13, lines 41 – 60];

the iterator automatically [col. 13, lines 41 – 60]:

determining the format of the collection from the format definition [Class Name

Description Collection 1 represents a collection of objects Iterator 36 to iterate over

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collection members. It has sub- classes to match each collection type; col. 8, lines 5 – 23];

creating a reader object that can process collections of the determined format [Query 13 the class for a query object which is associated with a specific datastore; col. 8, lines 41 – 60 and col. 10, lines 1 – 13];

associating the reader object with the collection [Query 13 is an interface for a query object associated with one specific datastore; col. 18, lines 35 – 45];

extracting the set of elements from the collection using the reader object [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

in response to a request to process an element in the set of elements [federated iterator 38 is used to iterate over the collective members of FederatedCollection 8 across collection boundaries; col. 16, lines 15 – 25];

finding the element in the set of elements [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

instantiating an object representing the element [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30]; and

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performing the requested step process on the object [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

7. As to claim 36, Chang teaches a system [col. 6, lines 42 – 55] adapted to simplify access and manipulation of a set of elements in a collection [col. 6, lines 17 – 43], wherein the collection includes a format definition [col. 7, line 59 – col. 8, line 25 and col. 9, lines 1 – 35], the system comprising:

a processor [col. 6, line 42 – col. 7, line 15]; and

a storage [col. 7, lines 57 – col. 8, line 2];

wherein the processor is adapted to simplify access and manipulation of the set of elements [col. 6, lines 17 – 43] in the collection [col. 10, line 57 – col. 11, line 22] by:

creating an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

pointing the iterator to the collection [setToFirstCollection() in the

FederatedIterator 38 will set the iterator position to the first non -collection element of the FederatedCollection 8; col.13, lines 41 – 60];

the iterator automatically [col. 13, lines 41 – 60]:

determining the format of the collection from the format definition [Class Name Description Collection 1 represents a collection of objects Iterator 36 to iterate over collection members. It has sub- classes to match each collection type; col. 8, lines 5 – 23];

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creating a reader object that can process collections of the determined format [Query 13 the class for a query object which is associated with a specific datastore; col. 8, lines 41 – 60 and col. 10, lines 1 – 13];

associating the reader object with the collection [Query 13 is an interface for a query object associated with one specific datastore; col. 18, lines 35 – 45];

extracting the set of elements from the collection using the reader object [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

instantiating a set of objects representing the set of elements [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30], wherein the set of objects can be iterated through and operated on by the iterator [first Iterator 36 is a regular iterator for FederatedCollection 8, thus each time returning a collection object 1. The second Iterator 42 is an iterator for a collection object 1, therefore it returns DDOs 28 as members of the collection 1; col. 13, lines 41 – 60]; and

storing the set of objects on the storage for subsequence use [datastore 9 is also a special query evaluator that can create and evaluate queries on the collection of objects stored in its physical storage; col. 7, line 57 – col. 8, line 2].

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8. As to claim 38, Chang teaches a system [col. 6, lines 42 – 55] adapted to simplify access and manipulation of a set of elements in a collection [col. 6, lines 17 – 43], wherein the collection includes a format definition [col. 7, line 59 – col. 8, line 25 and col. 9, lines 1 – 35], the system comprising:

- a processor [col. 6, line 42 – col. 7, line 15]; and

- a storage [col. 7, lines 57 – col. 8, line 2];

wherein the processor is adapted to simplify access and manipulation of the set of elements [col. 6, lines 17 – 43] in the collection [col. 10, line 57 – col. 11, line 22] by:

- creating an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

- pointing the iterator to the collection [setToFirstCollection() in the

FederatedIterator 38 will set the iterator position to the first non -collection element of the FederatedCollection 8; col.13, lines 41 – 60];

- the iterator automatically [col. 13, lines 41 – 60]:

- determining the format of the collection from the format definition [Class Name

Description Collection 1 represents a collection of objects Iterator 36 to iterate over collection members. It has sub- classes to match each collection type; col. 8, lines 5 – 23];

- creating a reader object that can process collections of the determined format [Query 13 the class for a query object which is associated with a specific datastore; col. 8, lines 41 – 60 and col. 10, lines 1 – 13];

- associating the reader object with the collection [Query 13 is an interface for a query object associated with one specific datastore; col. 18, lines 35 – 45];

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extracting the set of elements from the collection using the reader object [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

in response to a request to process an element in the set of elements [federated iterator 38 is used to iterate over the collective members of FederatedCollection 8 across collection boundaries; col. 16, lines 15 – 25];

finding the element in the set of elements [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

instantiating an object representing the element [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30];

storing the object on the storage for subsequence use [datastore 9 is also a special query evaluator that can create and evaluate queries on the collection of objects stored in its physical storage; col. 7, line 57 – col. 8, line 2]; and

performing the requested process on the stored object [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

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9. As to claim 39, Chang teaches a computer readable medium having program instructions stored thereon that, when executed, cause a computer system [col. 6, lines 42 – 55] to:

create an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

point the iterator to the collection [setToFirstCollection() in the FederatedIterator 38 will set the iterator position to the first non -collection element of the FederatedCollection 8; col.13, lines 41 – 60];

the iterator to automatically [col. 13, lines 41 – 60]:

determine the format of the collection from the format definition [Class Name Description Collection 1 represents a collection of objects Iterator 36 to iterate over collection members. It has sub- classes to match each collection type; col. 8, lines 5 – 23];

create a reader object that can process collections of the determined format [Query 13 the class for a query object which is associated with a specific datastore; col. 8, lines 41 – 60 and col. 10, lines 1 – 13];

associate the reader object with the collection [Query 13 is an interface for a query object associated with one specific datastore; col. 18, lines 35 – 45];

extract the set of elements from the collection using the reader object [a queryable collection 5, which is an object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

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instantiate a set of objects representing the set of elements [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30], wherein the set of objects can be iterated through and operated on by the iterator [first iterator 36 is a regular iterator for FederatedCollection 8, thus each time returning a collection object 1. The second iterator 42 is an iterator for a collection object 1, therefore it returns DDOs 28 as members of the collection 1; col. 13, lines 41 – 60]; and

in response to a request to process an element in the set of elements [col. 7, line 57 – col. 8, line 2], iterate through the set of objects [federated iterator 38 is used to iterate over the collective members of FederatedCollection 8 across collection boundaries; col. 16, lines 15 – 25] and perform the requested process on an object representing the element [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

10. As to claim 40, Chang teaches a computer readable medium having program instructions stored thereon that, when executed, cause a computer system [col. 6, lines 42 – 55] to:

create an iterator [create a federated iterator 38; col. 8, lines 25 – 40];

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point the iterator to the collection [setToFirstCollection() in the FederatedIterator
38 will set the iterator position to the first non -collection element of the
FederatedCollection 8; col.13, lines 41 – 60];

the iterator to automatically [col. 13, lines 41 – 60]:

determine the format of the collection from the format definition [Class Name
Description Collection 1 represents a collection of objects Iterator 36 to iterate over
collection members. It has sub- classes to match each collection type; col. 8, lines 5 –
23];

create a reader object that can process collections of the determined format
[Query 13 the class for a query object which is associated with a specific datastore; col.
8, lines 41 – 60 and col. 10, lines 1 – 13];

associate the reader object with the collection [Query 13 is an interface for a
query object associated with one specific datastore; col. 18, lines 35 – 45];

extract the set of elements from the collection using the reader object [a
queryable collection 5, which is an object subclass of both collection 1 and query
evaluator 11, i.e. it is a collection of objects which can further evaluate queries against
its members; col. 7, line 57 – col. 8, line 25];

in response to a request to process an element in the set of elements [federated
iterator 38 is used to iterate over the collective members of FederatedCollection 8
across collection boundaries; col. 16, lines 15 – 25];

find the element in the set of elements [a queryable collection 5, which is an
object subclass of both collection 1 and query evaluator 11, i.e. it is a collection of

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objects which can further evaluate queries against its members; col. 7, line 57 – col. 8, line 25];

instantiate an object representing the element [result is a FederatedCollection object 8, a collection of collection objects 1, which in turn contains data objects in a consistent and uniform structure as represented by dynamic data objects, DDOs 28; col. 21, lines 3 – 30]; and

perform the requested process on the object [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

11. As to claim 29, Chang teaches the collection is a member of the group selected from a file [col. 48, line 25 – col. 49, line 15], a database [col. 10, lines 12 – 42] and a webpage.

12. As to claim 31, Chang teaches the collection is a database [col. 10, lines 12 – 42] and at least one element of the set of elements is a data table [col. 41, lines 10 – 18].

13. As to claim 32, Chang teaches the collection is a data table [col. 41, lines 10 – 18] and at least one element of the set of elements is a member of the group selected from a data field [col. 10, lines 27 – 60], a data row and a data column [col. 57, line 51 – col. 58, line 25].

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14. As to claim 33, Chang teaches the requested process is a member of the group selected from add, delete, update, modify and retrieve [CRUD (add, retrieve, update, delete) operations; col. 8, line 60 – col. 9, line 35].

15. As to claim 35, Chang teaches uninstating the element by deleting the object after the requested process has been performed [col. 42, lines 55 – 65].

16. As to claim 37, Chang teaches in response to a request to process an element in the set of elements [col. 7, line 57 – col. 8, line 2], iterating through the stored set of objects [first Iterator 36 is a regular iterator for FederatedCollection 8, thus each time returning a collection object 1. The second Iterator 42 is an iterator for a collection object 1, therefore it returns DDOs 28 as members of the collection 1; col. 13, lines 41 – 60] and performing the requested process on an object representing the element [user can create a federated iterator 38 on this collection to iterate over the collection members to process the results; col. 42, lines 30 – 36 and col. 41, line 55 – col. 42, line 5].

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of U.S. Patent Application Publication No. 2002/0073119 to Richard.

20. As to claim 30, Chang does not teach the collection is a webpage and at least one element of the set of elements is a hyperlink.

However, Richard teaches a collection that is a webpage [nodes have an image type child node ("IMG"); p. 10 paragraph 0132 and p. 9 0117], at least one of the set of elements is a hyperlink [hypertext link; pp. 3 – 4, paragraph 0041], and iterating through the collection [iteration module is used for traversal of the tree by selecting nodes; p. 4, paragraph 0046].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Chang to include the features of iterating through a collection that is a webpage and at least one element of the set of elements is

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a hyperlink because this provides a method of converting input data marked up in any one of a plurality of markup formats [p. 2, paragraph 0015 of Richard].

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

CONTACT INFORMATION

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2194

LBZ


WILLIAM THOMSON
SUPERVISOR, PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 2194